

The Australian Centre for Neutron Scattering – Current Status and Upgrades

Elliot Paul Gilbert

Australian Centre for Neutron Scattering, Australian Nuclear Science and Technology | Elliot.gilbert@ansto.gov.au

Delivering world-class neutron scattering, the Australian Centre for Neutron Scattering (ACNS) is the home of neutron science in Australia, seeking to solve complex research and industrial problems for Australian and international users via merit-based access and user-pays programmes. Receiving neutrons from Australia's multi-purpose research reactor, OPAL, a suite of 15 neutron beams instruments utilise both the thermal and cold neutron beams, tackling problems across broad classes of materials, for the determination of atomic and molecular structure and dynamics, residual stress and neutron imaging. An update will be given on the OPAL reactor, the neutron beam facilities at ACNS, recent upgrades, user programme and future plans.

Speaker Biography

Elliot Gilbert led the QUOKKA small-angle neutron scattering (SANS) instrument project at the OPAL reactor, for which he is now co-responsible. He has been employing small-angle scattering methods for over 30 years across multiple classes of materials and disciplines in soft and hard condensed matter. He also leads ANSTO's research activities in food materials science, having written a number of reviews on the subject and initiated the 2-yearly international 'Neutrons and Food' conference series. In addition, Elliot has a passion for sample environments and co-developed a differential scanning calorimeter with which SANS can be simultaneously measured, as well as the neutron Rapid ViscoAnalyser where an emulated food process is conducted while structural changes can be monitored. He is a vicechair of the IUCr Commission on Small-Angle Scattering, chaired the 2012 international conference on small-angle scattering and is Honorary Professor at the University of Queensland. He serves on the Editorial Boards of the Journal of Applied Crystallography and Food Structure, and received the 2021 ANBUG Neutron Award for outstanding research in neutron science and leadership promoting the Australian neutron scattering community.



Monday, June 17, 2024

10:45 AM (UTC-05:00) Eastern Time (US & Canada) | Hybrid format

Attend in person (room K04B, NCNR) if you have access to the NIST campus, or remotely using the link below. NCNR access is not required.

<https://nist.zoomgov.com/j/1606393256?pwd=ZHRmQ0l1bG9jdzhaRE8yY3pWRHZpZz09>

Meeting ID: 160 639 3256

Passcode: 592050

One tap mobile

+16692545252,,1606393256#,,,,*592050# US (San Jose)
+16468287666,,1606393256#,,,,*592050# US (New York)

Dial by your location

• +1 669 254 5252 US (San Jose)
• +1 646 828 7666 US (New York)

• +1 646 964 1167 US (US Spanish Line)
• +1 551 285 1373 US (New Jersey)
• +1 669 216 1590 US (San Jose)
• +1 415 449 4000 US (US Spanish Line)

Meeting ID: 160 639 3256
Passcode: 592050

Find your local number:

<https://nist.zoomgov.com/join/1606393256>

Join by SIP

- 1606393256@sip.zoomgov.com

Join by H.323

- 161.199.138.10 (US West)
- 161.199.136.10 (US East)

Meeting ID: 160 639 3256

Passcode: 592050